#335 Breastfeeding and Postpartum Genito-Urinary Symptoms, a Prospective Cohort Study

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Introduction

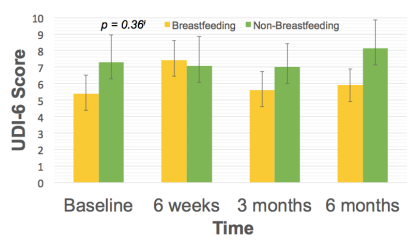
- Objective: to evaluate the impact of breastfeeding on postpartum lower urinary tract, vaginal, and sexual function symptoms.
- Hypothesis: Breastfeeding women will have clinically and statistically significantly worse lower urinary tract symptoms, as measured by the Urinary Distress Inventory-6 (UDI-6) at 3 months postpartum than non-breastfeeding women.
- Secondary Outcomes: Vaginal symptoms, sexual function, and impact of urinary symptoms were evaluated using the Most Bothersome Symptom (MBS) score, the Pelvic Organ Prolapse Incontinence Sexual Questionnaire, IUGA-Revised (PISQ-IR), and Incontinence Impact Questionnaire-7 (IIQ-7).

Methods

- International Review Board approval obtained
- Prospective Cohort Study
- Inclusion criteria
  - Primiparous, English-speaking, singleton delivery ≥ 34 weeks
- Exclusion criteria
  - Major fetal anomalies, stillbirth, < 18 years old, unable to consent, unable to complete survey in English, prior delivery ≥ 20 weeks
- Participants approached postpartum in hospital between March 2016 and September 2017
- Baseline survey completed on paper
- 6 week, 3 months, and 6 months completed online using REDCap[1] system
- Group Definitions
  - Breastfeeding – "Primarily Breastfeeding" (self report of >75% of baby's feeds are mother's milk) at 3 months
  - Non-Breastfeeding - Not breastfeeding at 3 months and stopped breastfeeding no later than 6 weeks postpartum
- Bivariate analysis: Two-sample t-tests and chi-square (or Fisher's exact) tests
- Multivariable linear and logistic regression
  - Control for age, race, BMI, diabetes, infant weight at delivery
- Power calculation:
  - Assumed Minimum Important Difference 11.6 points for UDI-6[2,3]
  - 80% power, two-tailed t-test, type 1 error rate 0.05
  - 74 participants needed per arm

Results

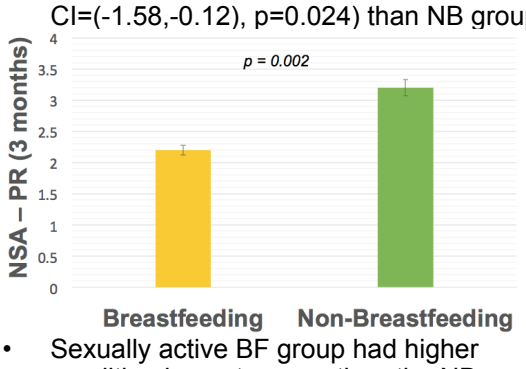
- 6059 women screened, 1167 eligible and approached, 361 participants
- 183 included in primary analysis
  - 110 Breastfeeding (BF)
  - 73 Non-Breastfeeding (NB)
- Demographics: Mean age 27.3 ± 5.7 years, 53.6% Caucasian, 62.3% vaginal delivery
- UDI-6 scores at 3 months were similar between BF (5.6±11.8) and NB (7±12) groups, p=0.43



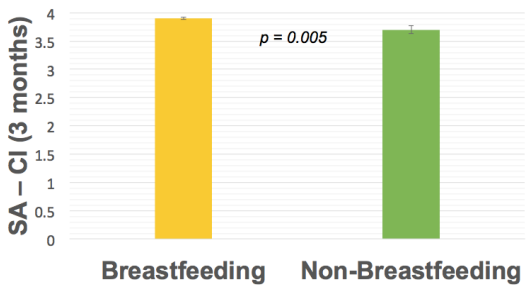
†p-value for the group difference over time is from GEE linear regression.

Results, continued

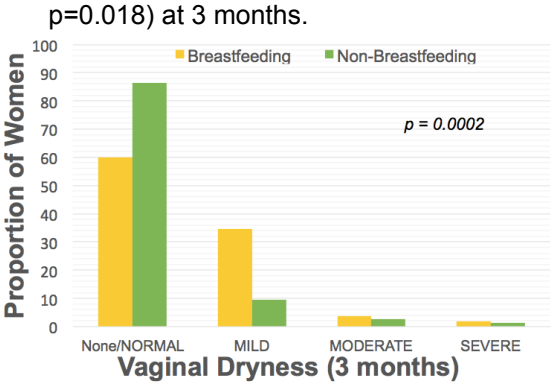
- No significant difference in IIQ-7 scores between groups (4.9±7.4 BF, 13±5 NB, p=0.07)
- Multivariable analysis
  - Not sexually active BF participants had lower partner-related scores (β=-0.85, 95% CI=(-1.58,-0.12), p=0.024) than NB group



  - Sexually active BF group had higher condition impact scores than the NB group (β=0.29, 95% CI=(0.11, 0.47), p=0.002).



  - BF subjects were more likely to have vaginal dryness (OR=2.82, 95% CI=(1.19, 6.66), p=0.018) at 3 months.



Conclusions and Summary

- Breastfeeding impacts vaginal dryness and sexual function, but does not affect lower urinary tract symptoms at a clinically significant level.
- Prospective, Cohort Study
- Validated measures used
  - UDI-6, IIQ-7, MBS, PISQ-IR
- Surveyed Postpartum
  - Baseline, 6 weeks, 3 months, 6 months
- Primary Outcome – UDI-6 at 3 months
  - No clinically/statistically significant difference
- Secondary Outcomes
  - Breastfeeding subjects almost 3 times more likely to have vaginal dryness
  - Breastfeeding and sexual function
    - Higher condition impact
    - Lower partner related scores

References

- [1]Harris PA, et al. J Biomed Inform. 2009;42(2):377-81.
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- [3]Barber MD, et al. Neurourol Urodynam 2011;30:541-6.